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U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE

ALASKA FOREST RESEARCH CENTER

Forest Insect Surveys

Quarterly Progress Report
October-December 1960

Floating Camp for Black-headed Budworm Research

The F. Y. 1961 increase in the research allotment to this research center will go toward a long-term program on the biology, ecology, and control of the black-headed budworm. Most of the first year allotment for the project is being spent on combination field quarters and laboratory space in the form of a wanigan or floating camp. A steel barge for the wanigan is in the process of modification by Duwamish Shipyards, Inc. of Seattle. The barge was built in 1959 and after modification for our use the overall measurements will be 52'5" long and 15'5" wide. A wooden frame structure for laboratory and living quarters will be built on the barge in Juneau. The completed wanigan will be a self-contained unit with a generator for electricity, 1200-plus gallons of fresh water storage, fuel oil storage, skiffs for water travel, and all the necessities for living and working in Southeast Alaska. It will provide a versatile research camp that can be easily towed to any desired location in the waterways of the Alaska panhandle.

Black-headed Budworm Surveys

Egg sampling that was started in late September was completed by mid-October.

The results of this survey, when compared with a similar survey of the 1959-60 generation, showed a population decline of 85-90 percent. While all of the available data have not been analyzed, it appears that the decline occurred late in the larval feeding period and before adult emergence. No appreciable disease was present in the population and parasitism does not appear to have been an important factor. Above normal rainfall during the last half of the larval feeding period may have been the main cause of the decline. In a recent article in the Canadian Entomologist G. T. Silver described an apparent relationship between weather conditions and the rise and fall of black-headed budworm populations. The decline of this outbreak appears to have followed the pattern he described.

Cooperation in Ips Study

Several species of Ips have been sent to George Hopping, Officer-in-Charge of the Forest Biology Laboratory, Calgary, for his use in revising the I. tridens complex. We will continue cooperation on this study this spring and summer by making collections of parent adults from individual galleries.

Reports

Downing, G. L.
1960. A cedar bark beetle outbreak, Petersburg Ranger District, North Tongass National Forest. Forest Insect Survey Report No. 6. October.

Juneau, Alaska
January 24, 1961

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Entomologist